

# The Case for Spending on Bicycle Facilities

## Better Infrastructure = More Cyclists

In Toronto, the average increase in cycling two years after installation of a bike lane was found to be 23%.

**Source:** Shifting Gears: City of Toronto Bike Plan (June 2001); City of Toronto

Construction of new bicycle lanes and paths in Minneapolis was correlated to an increase in modal share of bicycle traffic from 1.7% to 2% in the area where facilities were built, while there was no change in ridership in other parts of the city. Central city trips crossing the Mississippi River showed a much larger increase than trips that did not; reflecting a number of significant improvements to bicycle accommodation on bridges.

**Source:** A Longitudinal Analysis of the Effect of Bicycle Facilities on Commute Mode Share (2005); Barnes, Thompson & Krizek;

A 2006 Minnesota study found that individuals living within 400 meters of an on street bicycle facility are 2 to 3 times more likely to travel by bike than those living 1600 meters or more from an on street bike facility.

**Source:** Proximity to Trails and Retail: Effects on Urban Cycling and Walking (Kevin Krizek, Pamela J. Johnson); Journal of the American Planning Association, Winter 2006, Vol. 72, No.1.

The city of Copenhagen, Denmark estimates that when it builds a new cycle track on a section of road, the number of cyclists will grow by 20% along that section of roadway.

**Source:** Copenhagen: City of Cyclists Bicycle Account 2006 (2007); City of Copenhagen

### Case Study: Portland, Oregon

Between 1991 and 2007, Portland expanded the length of its bikeway network by 240%, giving priority to improvements on the approaches and spans of four bridges crossing the Willamette River that cuts through the heart of the city. Portland's 2007 bicycle count shows that trips by bicycle across the city's four main bicycle friendly bridges have increased by 410% since 1991. Overall, census data show that trips by bicycle in Portland doubled between 1990 and 2000. The trend toward increased rates of cycling continues in Portland, with the city seeing double digit increases in trips made by bicycle in each of the last three years. The percentage of workers commuting to work by bike rose from 1.8% in 1996 to 4.4% in 2006. A 2005 study of the bikeway improvements found that two key factors relating to the success of Portland's bicycle program were:

- ㊦ Quantity of facilities: Completeness of network (bikeways on all routes leading up to the bridge, gaps, clarity of route connections)
- ㊦ Quality of the facility itself: Separation on bridge spans versus bike lanes or shared lanes. On connector street routes, presence of bicycle lanes or bicycle boulevard improvements, and quality of intersection improvements

**Sources:** Bridging the Gaps: How the Quality and Quantity of a Connected Bikeway Network Correlates with Increasing Bicycle Use (July 2005); Mia Birk and Roger Geller; Portland Bicycle Counts 2007; Portland Department of Transportation

### Case Study: Sannich, British Columbia

Since 1991, the District of Saanich has been actively engaged in encouraging walking and cycling by providing enhanced infrastructures for both activities. Since 1993, over 50 kilometres of on-road cycling infrastructure have been constructed. Travel Behaviour Survey indicates that "to and from work" bicycle travel increased from 4 per cent in 1999 to 11 percent in 2004.

**Source:** Transport Canada, Active Transportation Infrastructure Program: Making Sustainable Transportation Choices Easier, Case Study 33

### Case Study: Odense, Denmark

Over a period of 4 years between 1999 and 2002, the city of Odense, Denmark (pop 200,000) was allocated DKK 20 million (about 4 million Canadian) from the Danish Ministry of Transport to subsidize 50 projects to increase cycling. The goals of the project were:

- ㊦ The citizens of Odense were to consciously feel an improvement in well-being.
- ㊦ The number of journeys by bicycle in Odense was to be increased by 20 per cent by the end of 2002, compared to the years 1996-1997. During the same period the number of people who use a bicycle more than three times a week was also to increase by 20 per cent.
- ㊦ The number of cyclists killed or injured in accidents involving more than one party was to be reduced by 20 per cent in the same period.
- ㊦ The citizens of the Municipality of Odense were to consciously feel that the city has become a better place in which to cycle.

Results were as follows:

- ㊦ Bicycle traffic in Odense has increased by 20 per cent
- ㊦ Over half of the new cycle journeys are made by motorists who have voluntarily decided to change their means of transport
- ㊦ The project also managed to reduce the number of accidents involving cyclists by 20 per cent
- ㊦ The health related gains from the project Cycle City have been especially satisfying and have resulted in large savings for the health sector. Concrete savings of DKK 33 million (\$6.8 million Canadian) have been demonstrated
- ㊦ The project has added 500 years to the total lifetime of the citizens of Odense, corresponding to five months longer life for males, because people are cycling more.
- ㊦ Mortality amongst the 15-49 year olds fell by 20 per cent

**Source:** Evaluering af Odense – Danmarks Nationale Cykelby (Troelsen, Jensen, Andersen); City of Odense; Summary in English.